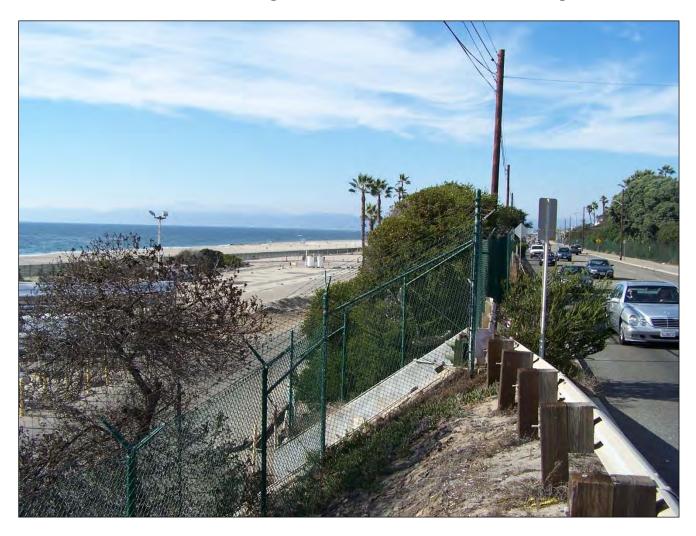


Figure 4.5-5
Viewshed D: View from Vista Del Mar, Looking Southwest

Figure 4.5-6
Viewshed E: View from Parking Lot North of Marine Terminal, Looking North



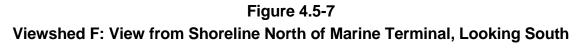
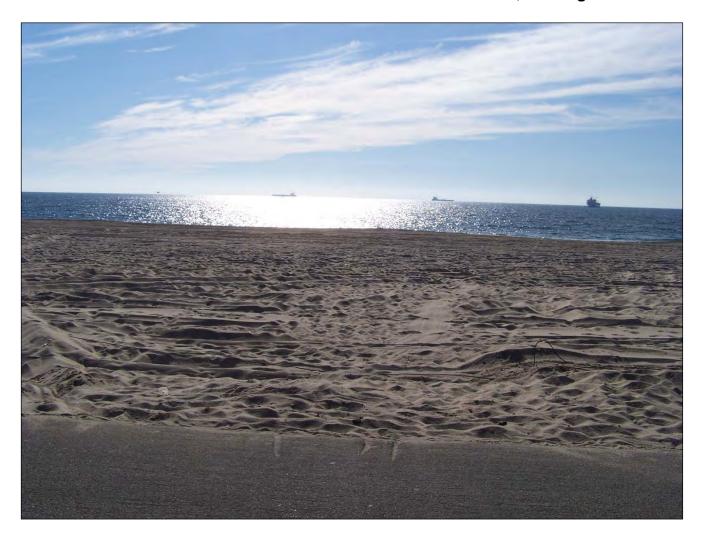




Figure 4.5-8
Viewshed G: View from Shoreline in Front of Marine Terminal, Looking West



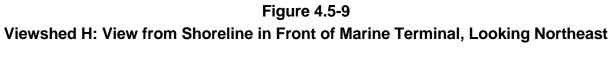
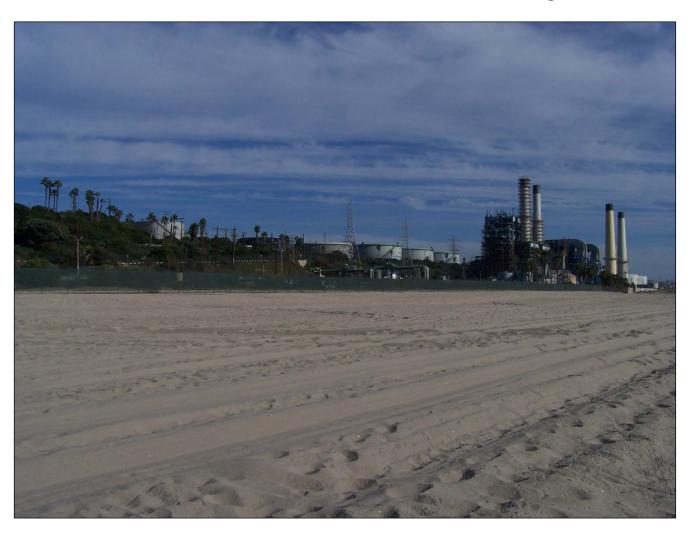




Figure 4.5-10
Viewshed I: View from Shoreline in Front of Marine Terminal, Looking Southeast



1 4.5.2 Regulatory Setting

2 Federal

- 3 There are no applicable Federal Regulations governing aesthetics for the renewed 30-
- 4 year lease for the Marine Terminal.

5 **State**

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- 6 The California Coastal Act, established in 1976, and as implemented by the city of El
- 7 Segundo for areas of the coastal zone within the city, is based on the findings declared
- 8 by the legislature in Section 30001 of the statute:
- 9 (a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.
- 12 (b) That the permanent protection of the State's natural and scenic resources is a paramount concern to present and future residents of the state and nation.
 - (c) That to promote the public safety, health, and welfare, and to protect public and private property, wildlife, marine fisheries, and other ocean resources, and the natural environment, it is necessary to protect the ecological balance of the coastal zone and prevent its deterioration and destruction.
 - (d) That existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this State and especially to working persons employed within the coastal zone.
- Section 30116 defines "sensitive coastal resources" as those that include areas possessing significant recreational value and highly scenic areas.
- 24 Section 30003 requires all public agencies and all Federal agencies, to the extent
- 25 possible under Federal law or regulations or the United States Constitution, to comply
- with the provisions of the Act.

27 Local

- 28 El Segundo General Plan Goal CN5. Urban Landscape, addresses the development of
- 29 programs to protect, enhance, and increase the amount and quality of urban landscape

- 1 to maximize aesthetic and environmental benefits. Policy CN5-1 is to preserve the
- 2 character and quality of existing neighborhood and civic landscapes.

3 4.5.3 Significance Criteria

- 4 Impacts for visual assessments are considered significant if one or a combination of the
- 5 following apply:
- Changes at the site, including changes to form, line color, and/or texture,
 substantially degrade the character of the site, degrade an existing viewshed, or
 alter the character by introducing anomalous structures or elements; or
- Changes at the site cause changes in the expectations of viewers, measured against the relative importance of those views, and cause a negative impression of the viewshed.

12 4.5.4 Impact Analysis and Mitigation

- 13 This section addresses the impacts of the proposed Project and the Alternatives on the
- 14 visual environment. The impacts of normal operations and accident conditions resulting
- in oiling of the water and shoreline are evaluated for the Marine Terminal and the Santa
- 16 Monica Bay area.

17 **Methodology**

- 18 Visual perception analysis employs factors such as visual character, visual
- 19 compatibility, and viewer sensitivity as criteria to determine the significance of an action
- 20 or impact. Visual character can be defined as landscapes composed of a distinctive
- 21 variety of form, line, color, and/or texture. These landscapes are made up of elements
- 22 such as: physiographical landforms (hills or canyons); structures (residences,
- commercial/office buildings); and water and vegetation patterns (lakes, streams, rivers,
- 24 native and ornamental plant life). The visual character of a site may be composed of a
- 25 combination of the existing elements of foreground (close-in shrubbery and trees),
- 26 middle ground (lake or water body), and background (distant rolling hills); these strong
- 27 visual elements and their strength or distinction influence how interesting the landscape
- 28 is.
- 29 Visual compatibility, or incompatibility, is analyzed by evaluating the effect of the
- 30 introduction of a new or anomalous element or structure into the existing environment.
- 31 The degree to which the new element blends in or is compatible with the existing

- 1 landscape is defined by evaluating several factors, including proximity and relative
- 2 scale.
- 3 Viewer sensitivity, which is a non-economic measure of public concern for scenic
- 4 quality, can further define the level of significance of modifications or alterations to a
- 5 viewshed. Viewer sensitivity is a measure of the changes in the expectation of viewers
- and the relative importance of viewsheds to those who have views of a particular site.
- 7 Several factors contribute to sensitivity including character, compatibility, and duration.
- 8 Duration is the relative time that the project component would be visible either to a
- 9 permanent or mobile viewer.
- 10 Areas that would be potentially impacted by the 30-year lease for the Marine Terminal
- 11 may include nearby shoreline properties, such as: residences in the El Porto
- 12 neighborhood of the city of Manhattan Beach, which overlook the Marine Terminal;
- 13 upland residential properties in El Segundo with views of the ocean; recreational users
- 14 in Santa Monica Bay who see the Marine Terminal and activities in shipping lanes;
- 15 beach areas including the El Segundo beach and bike path, and viewers from other
- 16 shoreline areas, e.g., motorists traveling south along Vista Del Mar in the city of El
- 17 Segundo, that may be adversely affected should tanker accidents or oil spills occur.
- 18 This analysis considers the occurrence of an accidental spill as separate from normal
- 19 operations. In general, the potential impacts resulting from such an accidental spill will
- 20 degrade the visual quality of the water and shoreline that comes in contact with the
- 21 spilled materials. The degree of impact is influenced by factors that include, but are not
- 22 limited to, location, spill size, type of material spilled, prevailing wind and current
- conditions, the vulnerability and sensitivity of the shoreline, and response capability.
- 24 Routine Operations
- 25 The Project would not create new construction, except for ongoing maintenance
- 26 activities, including rearranging seafloor pipelines and replacing pipelines, pipeline end
- 27 manifolds, and associated hoses. Any maintenance activities would be temporary in
- 28 nature and, once completed, viewsheds would return to existing conditions and the
- impacts related to construction would be less than significant.
- 30 The operation of the Marine Terminal under the proposed Project could potentially
- 31 produce an increase in vessel calls at the Marine Terminal. The fraction of time that a
- 32 vessel would be in view could potentially increase to 78 percent from the 2006 baseline
- 33 operations.

- 1 The Marine Terminal and Refinery have been at the same location since 1911. The 2 facilities associated with the Marine Terminal are situated in an industrial environment 3 and the public is accustomed to seeing vessels at the berths on a frequent basis. The 4 view of the offshore Marine Terminal facilities is dominated by tankers loading and 5 unloading, and since the berths generally are occupied more than 60 percent of the 6 time, views of large tankers are more prevalent than of the buoys. Attendant tugboats 7 and buoys are less observable and are partially obstructed much of the time because of 8 the large tankers. The visual activity in the Santa Monica Bay area since 1911 includes 9 the Chevron tanker presence and movement. Public perception would not change by 10 continuing activity at the Marine Terminal even though tanker presence, as a 11 percentage of time, could increase. Therefore, impacts would be less than significant 12 (Class III).
- In addition, since the percent of time that a vessel is visible is currently high, the increase in time represented by an increase in throughput of about one percent annually through 2040 would be minimally perceptible. Therefore, this impact would be considered less than significant (Class III).
- The proposed renewed 30-year lease would not include the addition of any new offshore or onshore facilities or structures. Therefore, no permanent significant modifications to the existing landscape or changes to form, line, color, or texture will result and impacts would be less than significant (Class III).
- The public perception of the single-story onshore structures at the Marine Terminal is that they are an extension of the facilities located on the Refinery property, which makes public sensitivity towards these structures low. Since no changes are proposed to the existing structures, there will be no changes in viewer expectations and impacts associated with the onshore facilities would be less than significant (Class III).

- 1 Impact AES-1: Oil Spills and Resultant Cleanup Operations Affect Visual
- 2 Quality
- 3 Oil spills would substantially degrade the character of the site and would result in
- 4 changes in the expectations of viewers (Potentially Significant, Class I).
- 5 This analysis considers an accidental spill separate from normal operations. In general,
- 6 the potential impacts resulting from an accidental spill would degrade the visual quality
- 7 of the water and the shoreline in contact with the spilled materials. The degree of
- 8 impact is influenced by factors that include, but are not limited to, location, spill size,
- 9 type of material spilled, prevailing wind and current environmental conditions,
- 10 vulnerability and sensitivity of the shoreline, and response capability.
- 11 Accidents at the Marine Terminal during mooring, loading, and unloading pose the
- 12 greatest risk of a spill. While vessels are in transit the risk of a spill decreases
- 13 however, the size of a spill while in transit could be significantly greater. The areas
- most susceptible to oiling are highlighted in the consequence modeling in Section 4.1,
- 15 System Safety and Reliability. This oil spill modeling indicates the impacts of several
- 16 possible oil spill scenarios. In general, any oil spill at the Marine Terminal would result
- in the migration of material predominantly eastward, as the winds blow predominantly
- 18 eastward. The area affected would primarily be along the east areas of the Santa
- 19 Monica Bay directly eastward of the Marine Terminal. However, depending on the wind
- 20 direction and currents, impacts could potentially extend along the coastline from Long
- 21 Beach to Santa Barbara.
- 22 Spills originating at or near the Marine Terminal and in shipping channels in the Santa
- 23 Monica Bay have the potential to impact viewpoints of the El Segundo area and the
- 24 shoreline from Dockweiler State Beach Park to Malibu, including Marina Del Rey,
- Venice Beach, Santa Monica, and other Los Angeles city and County beaches, to the
- 26 north; Manhattan Beach, Hermosa Beach, Redondo Beach, the Palos Verdes Peninsula
- 27 area, and Los Angeles Harbor to the south; and the Channel Islands to the west. The
- 28 visual impact of oil spills depends on several factors including the duration and extent of
- 29 shoreline and water surface oiling as well as current local conditions.
- 30 Larger oil spills (275,000 barrels [bbl] and larger) could cause widespread shoreline and
- 31 surface water oiling. Visually, oiling conditions could range from light oiling, which
- 32 appears as a surface sheen, to heavy oiling, which included lumps of floating tar. For
- equally sized spills under similar wind conditions, spills of heavier crudes would remain

- 1 on the surface longer and would therefore have greater impacts than spills of lighter
- 2 crudes or diesel products.
- 3 The presence of the oil on the water would change the color and, in heavier oiling,
- 4 textural appearance of the water surface. The potential presence of oil on shoreline
- 5 surfaces could cover surfaces with a brownish to black layer of slick or gooey material.
- 6 The impact could last for extended periods of time, from hours to weeks, depending on
- 7 the level of physical impact and cleanup ability. The briefest significant adverse impacts
- 8 would generally be anticipated where light oiling dispersed rapidly, such as a diesel
- 9 spill. In the event of medium to heavy oiling over a wide-spread area, cleanup efforts
- and residual effects of oiling may be observed for more than three months for onshore
- 11 clean-up, and significant adverse impacts would result. The labor and equipment,
- 12 including barges and other vessels, involved in the cleanup itself would also contribute
- to the visual impact.
- 14 During oil spill accidents, viewer sensitivity to an area tends to increase. As the public
- 15 becomes aware of a spill situation, sensitivity levels increase. Thus, unless a spill is
- immediately contained by booming and cleanup, the visual effects of even a relatively
- 17 small spill of 500 bbl would be significant. Such an oil spill would cause a significant
- 18 impact, which would remain significant even after implementation of the identified
- 19 Mitigation Measures.
- 20 Mitigation Measures
- 21 Mitigation Measures for oil spill impacts include those measures provided in Section 4.1,
- 22 System Safety and Reliability, and Section 4.3, Biological Resources. These include
- 23 MM SSR-1a and SSR-1b and MM SSR-2a through SSR-2k and MM BIO-1a and BIO-
- 24 **1b**, as they relate to preventing and minimizing a spill and aesthetic impacts associated
- with a spill.
- 26 Rationale for Mitigation
- 27 These measures would minimize oil spills and maximize cleanup efforts, reducing the
- 28 impact to the visual environment.
- 29 Residual Impacts
- 30 While oil spills would eventually be remediated, during the short-term duration of
- 31 cleanup activities, impacts would remain significant after mitigation measures have
- 32 been implemented (Potentially Significant, Class I).

1 2 3

Table 4.5-1 Summary of Significant Aesthetic Impacts and Mitigation Measures Proposed Project

Impact	Mitigation Measures
AES-1: Oil Spills Affect Visual Quality	MM SSR-1a, SSR-1b, and SSR-2a through SSR-2k, BIO-1a and BIO-1b

4 4.5.5 Impacts of Alternatives

5 No Project Alternative

- 6 Construction
- 7 If the Marine Terminal lease were terminated, it is assumed that the terminal would be
- 8 closed, the equipment would be removed, and the site would be cleaned to prepare for
- 9 alternate uses. Chevron would import crude oil and export products through other
- 10 means, including the Port of Los Angeles (POLA) and Port of Long Beach (POLB)
- 11 terminals, onshore pipelines, unit trains, trucking, or, most likely, a combination of those
- 12 means of transportation.
- 13 Moving construction equipment to and from the site to abandon the Terminal and
- 14 activities at the onshore facilities would be visible from Vista Del Mar and the sandy
- 15 beaches along the coastline. Additional vehicles travelling through the area during the
- 16 dismantlement of facilities could become a visual annoyance. The additional traffic
- 17 would add to the sensitivity of viewers and the visual disturbance of trucks on the
- 18 roadway, especially near residents and businesses. Short-term decommissioning of the
- 19 Marine Terminal would cause an adverse, but less than significant, impact (Class III).
- 20 Recommended visual barriers would shield views of the dismantling from users of the
- 21 bike path and beach.
- To dismantle the offshore facilities, barges would remove the buoys and, potentially, the
- 23 pipelines. This process would be temporary and localized to the immediate area of the
- 24 offshore facilities. Because barges are typical of activity in industrial water areas,
- 25 impacts would be adverse, but less than significant (Class III). Dismantling the Marine
- 26 Terminal would create a beneficial visual impact since tankers would no longer be in the
- 27 viewshed from Manhattan Beach and upland areas within El Segundo.

- 1 It is speculative to conclusively identify future uses of the site. However, if the area
- 2 previously occupied by the facility would be retained for other industrial uses, the visual
- 3 effect would be similar to that of the existing Refinery, and would be considered less
- 4 than significant (Class III).

5 CBM Relocation in State Waters for Crude Only

- 6 Under the Conventional Buoy Mooring (CBM) Relocation in State Waters for Crude Oil
- 7 Only alternative, the Marine Terminal would continue to operate, but Berth 4 would be
- 8 relocated farther offshore in state waters. There would be a reduction in the visibility of
- 9 tankers since some of the tankers would be relocated farther offshore and thereby less
- 10 visible than under existing conditions. Although fewer tankers would visit the berths
- 11 since the larger very large crude carriers (VLCC) tankers could unload directly at the
- 12 new berth, time at berth is quantified by the amount of materials loaded or unloaded,
- which would remain the same as under the proposed Project.
- 14 Construction
- 15 Relocating the buoys may temporarily disrupt the visual environment because of the
- 16 increase in construction barge activity. Due to the temporary nature of the construction
- 17 activities and the public's expectation of vessel activity in the vicinity of the existing
- berths, impacts are anticipated to be less than significant (Class III).
- 19 Operations
- 20 No alterations to the existing visual landscape of the onshore Marine Terminal facilities
- 21 would be made under this alternative; therefore, there would not be any anticipated
- 22 impacts.
- 23 Upon relocation, the Berth 4 buoys would be less visible from onshore locations;
- 24 however, when tankers moor at the berths, views of the tankers dominate the
- 25 landscape. The tankers would remain visible from onshore locations under this
- 26 alternative, even though some of them would moor farther offshore. Although the
- 27 number of vessels visiting the berths would be reduced, time at berth would be similar
- 28 to the proposed Project because time is quantified as a function of the amount of
- 29 materials loaded or unloaded. Public sensitivity would remain the same as under the
- 30 proposed Project; therefore, impacts to the existing environment would not be
- 31 anticipated.

- 1 However, Impact AES-1 (Class I) would occur in the event of an oil spill accident and
- 2 would be the same as the proposed Project. MM SSR-1a and SSR-1b, SSR-2a
- 3 through SSR-2k, BIO-1a and BIO-1b, and BIO-3a and BIO-3b would be implemented,
- 4 but the impact would remain significant after implementation (Class I).

5 SPM Replacement in State Waters for Crude Only

- 6 Under this alternative, the Marine Terminal would continue to operate, but the Berth 4
- 7 CBM would be decommissioned and replaced with a single point mooring (SPM) farther
- 8 from shore in state waters.
- 9 Construction
- 10 The SPM replacement alternative would require dismantling Berth 4, installing an SPM,
- 11 and modifying onshore facilities. These activities would be more extensive than the
- 12 construction under the CBM relocation alternative or the maintenance under the
- 13 proposed Project. However, public sensitivity to the activities required for installing the
- 14 SPM and removing the existing berth is not likely to be high, since vessel activities in
- the vicinity of the offshore Marine Terminal facilities are typical. Therefore, temporary
- 16 construction activities are not anticipated to result in significant impacts to the existing
- 17 environment (Class III).
- 18 Operations
- 19 Operation of the SPM system would allow tankers to swing freely around the mooring
- 20 with the prevailing wind. Tankers currently viewed while offshore are currently immobile
- 21 vessels. However, public sensitivity is not anticipated to increase due to the additional
- 22 movement of tankers. Therefore, no significant impacts (Class III) to the visual
- 23 landscape would be anticipated under this alternative.
- However, Class I impact **AES-1**, associated with spill potential, would occur similarly to
- 25 with the proposed Project and could be significant. Mitigation Measures SSR-1a and
- 26 SSR-1b, SSR-2a through SSR-2k, and BIO-1a and BIO-1b would be implemented;
- 27 however, the impact would remain significant after mitigation (Class I).
- 28 VLLC Use of Pier 400
- 29 Under this alternative, the Marine Terminal would continue to operate, but a portion of
- 30 Marine Terminal operations would be satisfied by using the Pier 400 facility. The only
- 31 Marine Terminal traffic displaced under this alternative would be VLCC traffic that
- 32 currently transports light crude oil to the Refinery by lightering offshore and using

- 1 smaller tankers to call on the Marine Terminal. Under this alternative, all exports of
- 2 refined product and imports of heavier crude oil would continue using the existing
- 3 Marine Terminal. Impacts at the Marine Terminal would be reduced under this
- 4 alternative since fewer vessels would call at the Marine Terminal. However, vessel calls
- 5 carrying heavier crude oil and products would still call at the Terminal and the visual
- 6 impacts of this alternative, although less severe than current operations or the proposed
- 7 Project, would still be similar.
- 8 This alternative would require some construction and modifications related to the
- 9 pipelines that would create temporary disruption to the existing pipeline areas.
- 10 VLCC tankers would travel directly to the POLA/POLB, but the public is accustomed to
- seeing large container ships and other large tankers travelling through the harbor so no
- 12 additional visual impacts are expected in the POLA/POLB area.

13 4.5.6 Cumulative Projects Impact Analysis

- 14 The proposed Marine Terminal 30-year lease grant and other related Projects in the
- 15 Santa Monica Bay area are not anticipated to cause significant adverse alterations or
- 16 modifications to the existing landscape; and thus, no actions are anticipated that would
- 17 cause significant adverse impacts to the visual environment. In fact, long-term
- 18 improvements to the Santa Monica Bay ecosystem, which is characterized by a rich
- diversity of migratory and resident species of mammals, birds, fishes, and invertebrates
- 20 (see Section 4.3, Biological Resources), and public facilities, including the beach and
- 21 associated parking facilities, should enhance the visual environment.